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| 7550 03/27/2908<br>Sudhir G Deshmukh<br>E1 du Pont de Nemours and Company |             |                        | EXAMINER            |                  |
|   |             |                        | SERGENT, RABON A    |                  |
| Legal Patents<br>4417 Lancaste  | r Pike      |                        | ART UNIT            | PAPER NUMBER     |
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

## Application No. Applicant(s) 10/539,675 CORCORAN ET AL. Office Action Summary Examiner Art Unit Rabon Sergent 1796 -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --Period for Reply A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS. WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). Status Responsive to communication(s) filed on 2a) ☐ This action is FINAL. 2b) This action is non-final. 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213. Disposition of Claims 4) Claim(s) 1-25 is/are pending in the application. 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration. 5) Claim(s) \_\_\_\_\_ is/are allowed. 6) Claim(s) 1-25 is/are rejected. 7) Claim(s) \_\_\_\_\_ is/are objected to. 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement. Application Papers 9) The specification is objected to by the Examiner. 10) The drawing(s) filed on is/are; a) accepted or b) objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. Priority under 35 U.S.C. § 119 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some \* c) None of: Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). \* See the attached detailed Office action for a list of the certified copies not received.

1) Notice of References Cited (PTO-892)

Notice of Draftsperson's Patent Drawing Review (PTO-948)

Information Disclosure Statement(s) (PTO/S5/08)
Paper No(s)/Mail Date

Attachment(s)

Interview Summary (PTO-413)
Paper No(s)/Mail Date.

6) Other:

Notice of Informal Patent Application

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 Claims 1-25 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Firstly, within claims 1 and 25, with respect to the polymeric component and oligomeric component, applicants have specified that the components have groups that crosslink with an isocyanate; however, it is unclear if this language requires more than simply stating that the reactive groups react with the isocyanate.

Secondly, within claim 25, it is unclear what degree of mixing is required by the "thoroughly mixed" language.

Lastly, with respect to claim 25, it is unclear exactly what additives are required to be present by the claim language. As drafted, the additive language of the claim can be construed as requiring (1) a di-substituted phenol antioxidant, alone, or (2) a hydroperoxide decomposer and an ultraviolet light absorber and a hindered amine light stabilizer, in combination. In view of the language of claim 1, it does not appear that this is what applicants desire. Clarification is required.

2. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference

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claim(s). Sec, e.g., In re Berg, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); In re Goodman, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); In re Longi, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); In re Van Ornum, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); In re Vogel, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and In re Thorington, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

3. Claims 1-25 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 7-18, and 23-25 of copending Application No. 11/330,476. Although the conflicting claims are not identical, they are not patentably distinct from each other because each claim set is drawn to coating compositions wherein the instantly claimed reactants and additives are encompassed by the copending claim set.

This is a <u>provisional</u> obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

 Claims 1-25 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 6-17, 19-33, and 37 of copending Art Unit: 1796

Application No. 11/300,180 in view of Beach et al. (\*172) or Stahrfeldt et al. (\*193). Each claim set is drawn to coating compositions wherein the instantly claimed reactants and additives, save for the hydroperoxide decomposer, are encompassed by the copending claim set. Though the copending claims are silent with respect to the hydroperoxide decomposer, the position is taken hydroperoxide decomposers were known stabilizers for polymeric systems, including polyurethanes, at the time of invention. See column 4, line 36 within Beach et al. See column 1, lines 11 and 12 within Stahrfeldt et al. Accordingly, since it has been held that it is obvious to utilize a known compound for its known function, the position is taken that it would have been obvious to incorporate known hydroperoxide decomposer stabilizers within the coating composition of the copending claims, so as to arrive at the instant invention. *In re Linder*, 173 USPQ 356. *In re Dial et al.*, 140 USPQ 244.

This is a provisional obviousness-type double patenting rejection.

5. Claims 1-25 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 4-18, 22-33, and 35 of copending Application No. 11/303,077 in view of Beach et al. ('172) or Stahrfeldt et al. ('493). Each claim set is drawn to coating compositions wherein the instantly claimed reactants and additives, save for the hydroperoxide decomposer, are encompassed by the copending claim set. Though the copending claims are silent with respect to the hydroperoxide decomposer, the position is taken hydroperoxide decomposers were known stabilizers for polymeric systems, including polyurethanes, at the time of invention. See column 4, line 36 within Beach et al. See column 1, lines 11 and 12 within Stahrfeldt et al. Accordingly, since it has been held that it is obvious to utilize a known compound for its known function, the position is taken that it would have been

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obvious to incorporate known hydroperoxide decomposer stabilizers within the coating composition of the copending claims, so as to arrive at the instant invention. *In re Linder*, 173 USPO 356. *In re Dial et al.*, 140 USPO 244.

This is a provisional obviousness-type double patenting rejection.

6. Claims 1-3, 11, 12, 16-24 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1 and 2 of copending Application No. 11/303,080 in view of Primeaux, II et al. ('736) and either Beach et al. ('172) or Stahrfeldt et al. ('493). Each claim set is drawn to coating processes wherein the coating composition reactants of the instant claims are encompassed by the copending claims. Though the copending claims are silent regarding the instantly claimed additives, the position is taken that the instantly claimed additives were known to be beneficial for the production of coatings and polymeric systems at the time of invention. Primeaux, II et al. disclose at column 11, line 35 through column 12, line 38 the use of a combination of additives that correspond to applicants' claimed antioxidant, ultraviolet light absorber, and hindered amine light stabilizer to improve stability of polyureas derived from aspartates. Furthermore, hydroperoxide decomposers were known stabilizers for polymeric systems, including polyurethanes, at the time of invention. See column 4, line 36 within Beach et al. See column 1, lines 11 and 12 within Stahrfeldt et al. Accordingly, since it has been held that it is obvious to utilize a known compound for its known function, the position is taken that it would have been obvious to incorporate known antioxidants, ultraviolet light absorbers, hindered amine light stabilizers, and hydroperoxide decomposers within the coating composition of the copending claims, so as to obtain a composition having improved light stability and weatherability. The position is further taken

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that one of ordinary skill in possession of the process of using the coating would have also been in possession of the coating compositions. *In re Linder*, 173 USPQ 356. *In re Dial et al.*, 140 USPQ 244.

This is a provisional obviousness-type double patenting rejection.

7. Claims 1-3, 11, 12, 16-24 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1 and 3 of copending Application No. 11/300,013 in view of Primeaux, II et al. ('736) and either Beach et al. ('172) or Stahrfeldt et al. ('493). Each claim set is drawn to coating processes wherein the coating composition reactants of the instant claims are encompassed by the copending claims. Though the copending claims are silent regarding the instantly claimed additives, the position is taken that the instantly claimed additives were known to be beneficial for the production of coatings and polymeric systems at the time of invention. Primeaux, II et al. disclose at column 11, line 35 through column 12, line 38 the use of a combination of additives that correspond to applicants' claimed antioxidant, ultraviolet light absorber, and hindered amine light stabilizer to improve stability of polyureas derived from aspartates. Furthermore, hydroperoxide decomposers were known stabilizers for polymeric systems, including polyurethanes, at the time of invention. See column 4, line 36 within Beach et al. See column 1, lines 11 and 12 within Stahrfeldt et al. Accordingly, since it has been held that it is obvious to utilize a known compound for its known function, the position is taken that it would have been obvious to incorporate known antioxidants, ultraviolet light absorbers, hindered amine light stabilizers, and hydroperoxide decomposers within the coating composition of the copending claims, so as to obtain a composition having improved light stability and weatherability. The position is further taken

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that one of ordinary skill in possession of the process of using the coating would have also been in possession of the coating compositions. *In re Linder*, 173 USPQ 356. *In re Dial et al.*, 140 USPO 244.

This is a provisional obviousness-type double patenting rejection.

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

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 Claims 1-7, 9-13, 16, 17, and 19-25 are rejected under 35 U.S.C. 102(e) as being anticipated by Primeaux, II et al. (\*736).

Patentees disclose compositions, suitable for use as coatings, wherein the coatings are derived from polyisocyanates and secondary amine containing aspartate curing agents. Patentees further disclose that additional reactive components, such as polyester polyols and polyacrylate polyols, may be incorporated within the composition. See abstract; columns 2-5; and column 13, lines 55+. Additionally, patentees disclose at column 11, line 35 through column 12, line 38 that a combination of additives comprising an ultraviolet light absorber, a hindered amine light stabilizer, and a di-substituted phenol antioxidant may be incorporated into the composition to improve stability.

 Claims 1, 5-10, 14, 15, 18, and 20-25 rejected under 35 U.S.C. 103(a) as being unpatentable over Primeaux, II et al. ('736) in view of Lamb et al. ('782) and Chung et al. (US 2003/0232920) and further in view of Beach et al. ('172) or Stahrfeldt et al. ('493).

As aforementioned within paragraph 9, Primeaux, II et al. disclose compositions, suitable for use as coatings, wherein the coatings are derived from polyisocyanates and secondary amine containing aspartate curing agents. Patentees further disclose that additional reactive components, such as polyester polyols and polyacrylate polyols, may be incorporated within the composition. See abstract; columns 2-5; and column 13, lines 55+. Additionally, patentees disclose at column 11, line 35 through column 12, line 38 that a combination of additives comprising an ultraviolet light absorber, a hindered amine light stabilizer, and a di-substituted phenol antioxidant may be incorporated into the composition to improve stability.

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11. The primary reference is silent regarding applicants' claimed urethane oligomer, the use

of hydroperoxide decomposers and polyacrylates derived from isobornyl methacrylate. Still, the

position is taken that each of these components was known at the time of invention to be useful

in the production of polymeric systems, including coatings. Lamb et al. disclose the use of

applicants' claimed isobornyl methacrylate-derived polyacrylate polyol in the production of

 $poly is ocyanate\ cured\ coating\ compositions,\ suitable\ for\ use\ as\ clear coat\ finishes\ on\ automobiles.$ 

Chung et al. disclose the use of applicants' claimed ure than oligomer in the production of  $% \left( 1\right) =\left( 1\right) \left( 1\right)$ 

coating compositions, suitable for use as clearcoat finishes on automobiles. Furthermore,

hydroperoxide decomposers were known stabilizers for polymeric systems, including

polyurethanes, at the time of invention. See column 4, line 36 within Beach et al. See column 1,

lines 11 and 12 within Stahrfeldt et al. Accordingly, since it has been held that it is obvious to

utilize a known compound for its known function, the position is taken that it would have been

obvious to incorporate isobornyl methacrylate-derived polyols or urethane oligomers into the

composition of the primary reference so as to obtain an improved clearcoating composition and

that it would have been obvious to incorporate hydroperoxide decomposers within the coating

composition of the primary reference, so as to obtain a composition having improved light stability and weatherability. In re Linder, 173 USPQ 356. In re Dial et al., 140 USPQ 244.

Any inquiry concerning this communication should be directed to R. Sergent at telephone

number (571) 272-1079.

/Rabon Sergent/ Primary Examiner, Art Unit 1796

R. Sergent March 24, 2008